



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Fourth dose of COVID-19 vaccines in Israel



Published Online
January 11, 2022
[https://doi.org/10.1016/S2213-2600\(22\)00010-8](https://doi.org/10.1016/S2213-2600(22)00010-8)

On Jan 2, 2022, Israel's prime minister Naftali Bennett announced that the country would offer a fourth dose of the COVID-19 vaccine to health-care workers and people older than 60 years. A fourth dose has already been approved for Israelis in immunocompromised groups. Israel has recently seen a surge in SARS-CoV-2 infections. Hospitalisations are also increasing, though overall numbers remain low.

Around two-thirds of Israelis have received two doses of the COVID-19 vaccine. 80% of the eligible

population have received two doses plus a booster jab, including 90% of individuals over the age of 60 years. Israel began vaccinating 5–11-year-olds in November, 2021. The efficiency of the early vaccination campaign, which had delivered two doses to over half the Israeli population by April, 2021, meant that Israel was well-placed to observe how immunity waned over time. When the delta variant of SARS-CoV-2 hit the country, it became apparent that individuals who had been vaccinated more than 6 months previously were not adequately protected against severe disease. In July, 2021, Israel began rolling out the world's first booster campaign against COVID-19.

After the emergence of the omicron variant in November, 2021, Israel moved quickly to restrict international travel. It established a rigorous network of contact tracing targeting the new variant. "The first phase of our response to omicron was containment; the aim was to delay local transmission for as long as possible", explains Ran Balicer, chair of Israel's National Experts Advisory

Panel on COVID-19. He reckons that the measures gained Israel several valuable weeks in which to prepare for the inevitable spike in cases.

"We have now moved from a containment phase to a more generalised approach of mitigation", Balicer told *The Lancet Respiratory Medicine*. "We know it is going to be very difficult to control the spread of the omicron variant, so we are concentrating on ensuring that the population at the highest risk of adverse outcomes is protected." Jonathan Sterne, professor of medical statistics and epidemiology at the University of Bristol (Bristol, UK) noted that there is good evidence that the third dose of the COVID-19 vaccine reduces short-term rates of clinical events. Whether a fourth dose will perform similarly remains to be seen. "Fourth doses are mainly being done on a precautionary basis; we have very little evidence of their effect either from studies of immune function or from observational studies of clinical events", said Sterne.

Talha Khan Burki



David Parker/Science Photo Library